



## RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/612,468  
Source: OIPE  
Date Processed by STIC: 7/29/2003

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm>), EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry directly to:  
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7<sup>th</sup> Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202  
Or  
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 04/24/2003



OIPE

**RAW SEQUENCE LISTING**  
**PATENT APPLICATION:** US/10/612,468

DATE: 07/29/2003  
 TIME: 13:35:30

Input Set : A:\EP.txt  
 Output Set: N:\CRF4\07292003\J612468.raw

3 <110> APPLICANT: Zhang, Jingwu Z.  
 4 Ho, Walter Kowk Keung  
 5 Zhang, Dongqing  
 6 Sun, Wei  
 W--> 7 <120> TITLE OF INVENTION: T Cell Receptor CDR3 Sequence and Methods for Detecting and Treating  
 W--> 8 Rheumatoid Arthritis  
 W--> 9 <130> FILE REFERENCE: 057186.000003  
 W--> 10 <140> CURRENT APPLICATION NUMBER:  
 C--> 11 <141> CURRENT FILING DATE: 2003-07-02 →<150> ← insert this mandatory numeric identifier and its response wherever <151>  
 W--> 11 <151> PRIOR FILING DATE: 2002-07-02  
 W--> 12 <160> NUMBER OF SEQ ID: 168

## ERRORED SEQUENCES

775 <210> SEQ ID NO: 66  
 776 <211> LENGTH: 21 19 shown below  
 777 <212> TYPE: DNA  
 778 <213> ORGANISM: Artificial  
 W--> 779 <220> FEATURE:  
 780 <221> NAME/KEY: primer\_bind  
 781 <223> OTHER INFORMATION: FAM (expand)-labeled BJ primer used for run-off reactions  
 W--> 782 <400> SEQUENCE: 66  
 E--> 784 ggagagtca gttccatca 19  
 1416 <210> SEQ ID NO: 114  
 1417 <211> LENGTH: 63  
 1418 <212> TYPE: DNA  
 1419 <213> ORGANISM: Artificial  
 W--> 1420 <220> FEATURE:  
 W--> 1421 <221> NAME/KEY:  
 1422 <223> OTHER INFORMATION: CDR3 nucleic acid sequence of BV14 clonotype derived from ST specimen of  
 1423 RA patients  
 W--> 1424 <400> SEQUENCE: 114  
 1426 tacttctgtg ccagcagttcc cacgcgggac aggggaaata atgaggcgtt cttcgccca 60  
 E--> 1427 gga 63 ← insert  
 1445 <210> SEQ ID NO: 116  
 1446 <211> LENGTH: 63  
 1447 <212> TYPE: DNA  
 1448 <213> ORGANISM: Artificial P.3  
 W--> 1449 <220> FEATURE:  
 W--> 1450 <221> NAME/KEY:  
 1451 <223> OTHER INFORMATION: CDR3 nucleic acid sequence of BV14 clonotype derived from

ST specimen of  
1452 RA patients

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W--> 1453 <400> SEQUENCE: 116  
1455 tacttctgtg ccagcagttc cccaatagcg gggagctcca atgagcagtt ctgcggccca 60  
E--> 1456 gga 63<-insert  
1473 <210> SEQ ID NO: 118  
1474 <211> LENGTH: 63  
1475 <212> TYPE: DNA  
1476 <213> ORGANISM: Artificial  
W--> 1477 <220> FEATURE:  
W--> 1478 <221> NAME/KEY:  
1479 <223> OTHER INFORMATION: CDR3 nucleic acid sequence of BV14 clonotype derived from  
ST specimen of  
1480 RA patients  
W--> 1481 <400> SEQUENCE: 118  
1483 tacttctgtg ccagcagttt ctggggccct acggacaata atgagcagtt ctgcggccca 60  
E--> 1484 gga 63<-insert  
1529 <210> SEQ ID NO: 122  
1530 <211> LENGTH: 63  
1531 <212> TYPE: DNA  
1532 <213> ORGANISM: Artificial  
W--> 1533 <220> FEATURE:  
W--> 1534 <221> NAME/KEY:  
1535 <223> OTHER INFORMATION: CDR3 nucleic acid sequence of BV14 clonotype derived from  
ST specimen of  
1536 RA patients  
W--> 1537 <400> SEQUENCE: 122  
1539 tacttctgtg ccagcagccc tagggagggc ctccctcaata atgagcagtt ctgcggccca 60  
E--> 1540 gga 63<-insert  
1888 <210> SEQ ID NO: 148  
1889 <211> LENGTH: 61  
1890 <212> TYPE: DNA  
1891 <213> ORGANISM: Artificial  
W--> 1892 <220> FEATURE:  
W--> 1893 <221> NAME/KEY:  
1894 <223> OTHER INFORMATION: CDR3 nucleic acid sequence of BV14 clonotype derived from  
ST specimen of  
1895 RA patients  
W--> 1896 <400> SEQUENCE: 148  
1898 tacttctgtg ccagcagttc ccgacttagcg ggagataaag gagcagtact tcggggccggg 60  
E--> 1899 c 61<-insert

RAW SEQUENCE LISTING ERROR SUMMARY                    DATE: 07/29/2003  
PATENT APPLICATION: US/10/612,468                    TIME: 13:35:31

Input Set : A:\EP.txt  
Output Set: N:\CRF4\07292003\J612468.raw

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 21  
Seq#:3; Line(s) 44  
Seq#:4; Line(s) 58  
Seq#:75; Line(s) 881  
Seq#:77; Line(s) 910  
Seq#:79; Line(s) 939  
Seq#:81; Line(s) 967  
Seq#:83; Line(s) 997  
Seq#:85; Line(s) 1025  
Seq#:87; Line(s) 1052  
Seq#:89; Line(s) 1079  
Seq#:91; Line(s) 1106  
Seq#:93; Line(s) 1133  
Seq#:95; Line(s) 1160  
Seq#:97; Line(s) 1187  
Seq#:99; Line(s) 1214  
Seq#:101; Line(s) 1241  
Seq#:103; Line(s) 1268  
Seq#:105; Line(s) 1295  
Seq#:107; Line(s) 1323  
Seq#:109; Line(s) 1351  
Seq#:111; Line(s) 1378  
Seq#:113; Line(s) 1406  
Seq#:115; Line(s) 1436  
Seq#:117; Line(s) 1464  
Seq#:119; Line(s) 1492  
Seq#:121; Line(s) 1520  
Seq#:123; Line(s) 1549  
Seq#:125; Line(s) 1577  
Seq#:127; Line(s) 1605  
Seq#:129; Line(s) 1632  
Seq#:131; Line(s) 1659  
Seq#:133; Line(s) 1686  
Seq#:135; Line(s) 1713  
Seq#:137; Line(s) 1740  
Seq#:139; Line(s) 1767  
Seq#:141; Line(s) 1795  
Seq#:143; Line(s) 1822  
Seq#:145; Line(s) 1851  
Seq#:147; Line(s) 1879  
Seq#:149; Line(s) 1908  
Seq#:151; Line(s) 1936  
Seq#:153; Line(s) 1964

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PATENT APPLICATION: US/10/612,468                   TIME: 13:35:31

Input Set : A:\EP.txt  
Output Set: N:\CRF4\07292003\J612468.raw

Seq#:155; Line(s) 1992  
Seq#:157; Line(s) 2020  
Seq#:159; Line(s) 2047  
Seq#:161; Line(s) 2075  
Seq#:163; Line(s) 2103  
Seq#:165; Line(s) 2131  
Seq#:167; Line(s) 2159

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete,  
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,2,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31  
Seq#:32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55  
Seq#:56,57,58,59,60,61,62,63,64,65,66,67,68,69,70,71,72,73,74,76,78,80,82,84  
Seq#:86,88,90,92,94,96,98,100,102,104,106,108,110,112,114,116,118,120,122,124  
Seq#:126,128,130,132,134,136,138,140,142,144,146,148,150,152,154,156,158,160  
Seq#:162,164,166,168

VERIFICATION SUMMARY  
PATENT APPLICATION: US/10/612,468

DATE: 07/29/2003  
TIME: 13:35:31

Input Set : A:\EP.txt  
Output Set: N:\CRF4\07292003\J612468.raw

L:7 M:283 W: Missing Blank Line separator, <120> field identifier  
L:9 M:283 W: Missing Blank Line separator, <130> field identifier  
L:10 M:283 W: Missing Blank Line separator, <140> field identifier  
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:11 M:289 W: Identifier Missing or Out-Of-Order, <150> PRIOR APP NO  
L:12 M:283 W: Missing Blank Line separator, <160> field identifier  
L:18 M:283 W: Missing Blank Line separator, <220> field identifier  
L:19 M:257 W: Feature value miss-spelled or invalid, <221> Name/Key for SEQ ID#:1  
L:22 M:283 W: Missing Blank Line separator, <400> field identifier  
L:30 M:283 W: Missing Blank Line separator, <220> field identifier  
L:31 M:257 W: Feature value miss-spelled or invalid, <221> Name/Key for SEQ ID#:2  
L:34 M:283 W: Missing Blank Line separator, <400> field identifier  
L:42 M:283 W: Missing Blank Line separator, <220> field identifier  
L:46 M:283 W: Missing Blank Line separator, <400> field identifier  
L:56 M:283 W: Missing Blank Line separator, <220> field identifier  
L:60 M:283 W: Missing Blank Line separator, <400> field identifier  
L:69 M:283 W: Missing Blank Line separator, <220> field identifier  
L:70 M:257 W: Feature value miss-spelled or invalid, <221> Name/Key for SEQ ID#:5  
L:73 M:283 W: Missing Blank Line separator, <400> field identifier  
L:82 M:283 W: Missing Blank Line separator, <220> field identifier  
L:86 M:283 W: Missing Blank Line separator, <400> field identifier  
L:109 M:283 W: Missing Blank Line separator, <220> field identifier  
L:113 M:283 W: Missing Blank Line separator, <400> field identifier  
L:137 M:283 W: Missing Blank Line separator, <220> field identifier  
L:140 M:283 W: Missing Blank Line separator, <400> field identifier  
L:148 M:283 W: Missing Blank Line separator, <220> field identifier  
L:151 M:283 W: Missing Blank Line separator, <400> field identifier  
L:159 M:283 W: Missing Blank Line separator, <220> field identifier  
L:162 M:283 W: Missing Blank Line separator, <400> field identifier  
L:170 M:283 W: Missing Blank Line separator, <220> field identifier  
L:173 M:283 W: Missing Blank Line separator, <400> field identifier  
L:181 M:283 W: Missing Blank Line separator, <220> field identifier  
L:184 M:283 W: Missing Blank Line separator, <400> field identifier  
L:192 M:283 W: Missing Blank Line separator, <220> field identifier  
L:195 M:283 W: Missing Blank Line separator, <400> field identifier  
L:203 M:283 W: Missing Blank Line separator, <220> field identifier  
L:206 M:283 W: Missing Blank Line separator, <400> field identifier  
L:215 M:283 W: Missing Blank Line separator, <220> field identifier  
L:218 M:283 W: Missing Blank Line separator, <400> field identifier  
L:226 M:283 W: Missing Blank Line separator, <220> field identifier  
L:229 M:283 W: Missing Blank Line separator, <400> field identifier  
L:237 M:283 W: Missing Blank Line separator, <220> field identifier  
L:240 M:283 W: Missing Blank Line separator, <400> field identifier  
L:248 M:283 W: Missing Blank Line separator, <220> field identifier  
L:251 M:283 W: Missing Blank Line separator, <400> field identifier  
L:259 M:283 W: Missing Blank Line separator, <220> field identifier  
L:262 M:283 W: Missing Blank Line separator, <400> field identifier  
L:270 M:283 W: Missing Blank Line separator, <220> field identifier

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Input Set : A:\EP.txt  
Output Set: N:\CRF4\07292003\J612468.raw

L:273 M:283 W: Missing Blank Line separator, <400> field identifier  
L:281 M:283 W: Missing Blank Line separator, <220> field identifier  
L:284 M:283 W: Missing Blank Line separator, <400> field identifier  
L:292 M:283 W: Missing Blank Line separator, <220> field identifier  
L:295 M:283 W: Missing Blank Line separator, <400> field identifier  
L:303 M:283 W: Missing Blank Line separator, <220> field identifier  
L:306 M:283 W: Missing Blank Line separator, <400> field identifier  
L:784 M:252 E: No. of Seq. differs, <211> LENGTH:Input:21 Found:19 SEQ:66  
L:896 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:76  
L:925 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:78  
L:953 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:80  
L:982 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:82  
L:1011 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:84  
L:1039 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:86  
L:1066 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:88  
L:1093 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:90  
L:1120 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:92  
L:1147 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:94  
L:1174 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:96  
L:1201 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:98  
L:1228 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:100  
L:1254 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:102  
L:1282 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:104  
L:1310 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:106  
L:1338 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:108  
L:1365 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:110  
L:1392 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:112  
L:1421 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:114  
L:1427 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:63 SEQ:114  
L:1450 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:116  
L:1456 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:63 SEQ:116  
L:1478 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:118  
L:1484 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:63 SEQ:118  
L:1507 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:120  
L:1534 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:122  
L:1540 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:63 SEQ:122  
L:1563 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:124  
L:1591 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:126  
L:1619 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:128  
L:1646 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:130  
L:1673 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:132  
L:1700 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:134  
L:1727 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:136  
L:1754 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:138  
L:1781 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:140  
L:1809 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:142  
L:1837 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:144  
L:1865 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:146  
L:1893 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:148

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/10/612,468

DATE: 07/29/2003

TIME: 13:35:31

Input Set : A:\EP.txt

Output Set: N:\CRF4\07292003\J612468.raw

L:1899 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:61 SEQ:148  
L:1923 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:150  
L:1950 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:152  
L:1978 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:154  
L:2007 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:156  
L:2034 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:158  
L:2061 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:160  
L:2089 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:162  
L:2117 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:164  
L:2145 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:166  
L:2173 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:168